



**FORM 100**  
**Personal Data Form**  
**PART I**

Date

2009/11/27

Family name Bazinet	Given name Laurent	Initial(s) of all given names LR	Personal identification no. (PIN) Valid 264042
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I hold a faculty position at an eligible Canadian college  
(complete Appendices B1 and C)

I do not or will not hold an academic appointment at a  
Canadian postsecondary institution

Place of employment other than a Canadian postsecondary  
Institution (give address in Appendix A)

**APPOINTMENT AT A POSTSECONDARY INSTITUTION**

Title of position Associate Professor	Tenured or tenure-track academic appointment Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Department aliments & de nutrition, Science des	Part-time appointment <input type="checkbox"/> Full-time appointment <input checked="" type="checkbox"/>	
Campus	<ul style="list-style-type: none"> <li>For all non-tenured or non tenure-track academic appointment and Emeritus Professors, complete Appendices B &amp; C</li> <li>For life-time Emeritus Professor and part-time positions, complete Appendix C</li> </ul>	
Canadian postsecondary institution Laval		

**ACADEMIC BACKGROUND**

Degree	Name of discipline	Institution	Country	Date yyyy/mm
Bachelor's				
Master's	Sciences et Technologie des Aliments	Université Laval	Canada	1994/02
Doctorate	Sciences et Technologie des Aliments	Université Laval	Canada	2000/06
Ingénieur	Agriculture et Agro-Alimentaire	École Supérieure d'Agriculture d'Angers	FRANCE	1993/12

**TRAINING OF HIGHLY QUALIFIED PERSONNEL**

Indicate the number of students, fellows and other research personnel that you:

	Currently		Over the past six years (excluding the current year)		Total
	Supervised	Co-supervised	Supervised	Co-supervised	
Undergraduate			17		17
Master's	1	1	6	1	9
Doctoral	4		4		8
Postdoctoral			1	1	2
Others	3		5		8
Total	8	1	33	2	44

## ACADEMIC, RESEARCH AND INDUSTRIAL EXPERIENCE (use one additional page if necessary)

Position held (begin with current)	Organization	Department	Period (yyyy/mm to yyyy/mm)
Associate Professor	Laval	aliments & de nutrition, Science des	2007/07
Professeur adjoint	Université Laval	Sciences des aliments et de nutrition	2002/07 to 2007/06
Agent de valorisation de la recherche	Université de Sherbrooke	Bureau de Liaison Entreprise-Université	2002/01 to 2002/06
Chercheur	Impérial Tobacco Canada	Procédé	2001/11 to 2002/01
Chercheur	Impérial Tobacco Canada	Procédés	2001/06 to 2001/10
Ingénieur-Chercheur	Agriculture et Agro-Alimentaire Canada	Technologies de conservation	1998/04 to 2001/04
Ingénieur de recherche	Agriculture et Agro-Alimentaire Canada	Technologies de conservation	1996/01 to 1998/03

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RESEARCH SUPPORT			
Family name and initial(s) of applicant	Title of proposal, funding source and program, and time commitment (hours/month)	Amount per year	Years of tenure (yyyy)
List all sources of support (including NSERC grants and university start-up funds) held as an applicant or a co-applicant: a) support held in the past four (4) years but now completed; b) support currently held, and c) support applied for. For group grants, indicate the percentage of the funding directly applicable to your research. Use additional pages as required.			
<b>a) Support held in the past 4 years</b>			
L. Bazinet	Mise au point et étude d'un procédé d'électromigration permettant la séparation, la purification et le fractionnement des isoflavones du soya FQRNT Établissement de nouveaux chercheurs : Fonctionnement	15,000 15,000 15,000 30 hours/month	2002 2003 2004
L. Bazinet	Mise au point et étude d'un procédé d'électromigration permettant la séparation, la purification et le fractionnement des isoflavones du soya FQRNT Établissement de nouveaux-chercheurs : Équipement	32,670 16,330	2002 2003
L. Bazinet	Appareillage de pointe pour l'étude des phénomènes électrodialytiques et de leurs impacts sur les composantes bio-alimentaires Fondation Canadienne pour l'Innovation Fonds de la relève (Équipement)	400,000 104,035	2003 2004
M. Britten, L. Bazinet et 7 autres	Régulation électrochimique du potentiel d'électroréduction du lait : impact sur l'efficacité de transformation et la qualité des produits FQRNT-Novalait-MAPAQ Action Concertée-Production et transformation laitière	60,000 (20%) 107,768 (20%) 45,500 (20%) 27,549 (20%) 9,183 (50%) 10 hours/month	2003 2004 2005 2006 2007

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<b>a) Support held in the past 4 years</b>			
L. Bazinet	Étude des phénomènes électrodialytiques : colmatage des membranes en cours de procédés CRSNG Subvention à la découverte 15 hours/month	24,000 24,000 24,000 24,000 24,000	2003 2004 2005 2006 2007
L.Bazinet	Appareillages de pointe pour l'étude des phénomènes électrodialytiques et leur impacts sur les composantes bio-alimentaires Fondation canadienne pour l'Innovation Fonds d'exploitation des infrastructures	19,990 19,990 9,990 5,000 5,000	2003 2004 2005 2006 2007
L.Bazinet, J. Arul, A. Maatescu et S. Brunet	Optimisation et rationalisation électrodialytique de la transformation du chitosane en oligomères FQRNT Action concertée sciences et technologies de la mer 15 hours/month	37,500 (80%) 65,000 (80%) 65,000 (80%) 27,500 (80%)	2004 2005 2006 2007
Y. Pouliot, L. Bazinet, et 4 collaborateurs	Développement d'une approche intégrée pour la valorisation des solides du babeurre FQRNT-Novalait-MAPAQ Action Concertée-Production et transformation laitière 5 hours/month	29,000 (10%) 85,667 (20%) 55,334 (20%)	2006 2007 2008

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<b>a) Support held in the past 4 years</b>			
S. Kaliaguine, L. Bazinet and 1 coll	Charge driven self-assembly of nanocomposites CRSNG RDC  10 hours/month	55,500 (20%) 61,250 (30%) 44,000 (10%)	2006 2007 2008
Desjardins, Y.; Bazinet, L. et 3 coll	Analyse et caractérisation des composantes majeures et mineures de la sève d'éryable et de ses coproduits Partenaire privé Contrat de recherche  5 hours/month	75,278 (10%) 75,278 (5%)	2006 2007
Bazinet, L.; Dhuister, P.; Amiot, J.	Production et purification des peptides bioactifs de Rubisco par un procédé unique couplant l'hydrolyse enzymatique et l'électrodialyse avec membrane d'ultrafiltration Ministère des Relations internationales Projet de coopération de recherche scientifique et technolog  5 hours/month	12,952 (20%) 19,017 (60%)	2007 2008
Bazinet, L.; Dhuister, P.; Amiot, J.	Séparation des peptides bioactifs de Rubisco par EDUF Partenaires privés Contrat de recherche  5 hours/month	25,000(100%) 25,000(100%)	2007 2008

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<b>a) Support held in the past 4 years</b>			
B. Cancino, L. Bazinet et 4 collaborateurs	Internacionalización del grupo de investigación en procesos de alimentos CONYCIT (Chili) Développement Coopération Internationale pour l'excellence	34,000 (10%) 34,000 (10%) 2 hours/month	2007 2008
<b>b) Support currently held</b>			
Bazinet L, Pouliot Y, Kaliaguine S, Belkhacemi K	Analyseur électrocinétique CRSNG outils de recherche	89,000(100%) 4 hours/month	
B. Lamarche, L. Bazinet et 38 collaborateurs	Institut des Nutraceutiques et des Aliments Fonctionnels (INAF) FQRNT Regroupements stratégiques	306,274 (2%) 300,000 (2%) 300,000 (2%) 300,000 (2%) 300,000 (2%) 300,000 (2%)	2004 2005 2006 2007 2008
L. Bazinet et 6 autres collaborateurs	Séparation séquentielle de fractions peptidiques d'hydrolysat de soya par électrodialyse avec membrane d'ultrafiltration et évaluation de leurs bioactivités FQRNT Projet de recherche en équipe	17,500 (80%) 52,000 (60%) 52,000 (60%) 34,500 (80%) 10 hours/month	2007 2008 2009 2010

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<b>RESEARCH SUPPORT</b>			
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<b>b) Support currently held</b>			
L. Bazinet, Y. Pouliot, L. Beaulieu et L. Saucier	Production de molécules protéiques antimicrobiennes naturelles par électrodialyse avec membrane d'ultrafiltration et remplacement des additifs alimentaires synthétiques dans les produits carnés MAPAQ Programme de soutien à l'innovation en agro-alimentaire 10 hours/month	15,000 (80%) 40,000 (80%) 40,000 (80%) 25,000 (80%)	2007 2008 2009 2010
Tétu, Bazinet et 3 coll	Green tea intake for maintenance of complete remission in woman with advanced ovarian cancer The Cancer Research Society 5 hours/month	20,000 (20%) 60,000 (20%) 40,000 (20%)	2007 2008 2009
Savard, T.; Bazinet, L. et 7 coll	Increased quality and safety of food by lactic/alcoholic fermentation Agriculture and Agri-Food Canada Research branch 5 hours/month	80,000 (10%) 80,000 (10%) 80,000 (5%) 80,000 (5%) 80,000 (5%)	2007 2008 2009 2010 2011
Turgeon, S.; Bazinet, L. et 4 coll.	Développement de breuvages fonctionnels à base de jus de fruits CRSNG Subvention de recherche et développement coopérative 10 hours/month	115,256 (30%) 134,536 (30%) 137,240 (30%) 62,956 (30%)	2008 2009 2010 2011

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<b>b) Support currently held</b>			
Bazinet, L	Impact of pulsed electric field on membrane fouling susceptibility during electromembrane processes CRSNG Subvention à la découverte 10 hours/month	26,000(100%) 26,000(100%) 26,000(100%) 26,000(100%) 26,000(100%)	2008 2009 2010 2011 2012
Bazinet, L. et 8 coll.	Comparaison de 5 technologies de fractionnement d'hydrolysat et caractérisation des bioactivités des fractions obtenues MDEIE PSR-SHRI Initiative Internationale 10 hours/month	50,000 (60%) 50,000 (60%) 50,000 (60%)	2009 2010 2011
<b>c) Support applied for</b>			
Bazinet L, Beaulieu L, Legault J	Séparation électromembranaire assistée de fractions peptidiques anti-cancer FQRNT Recherche en Équipe 10 hours/month	100,000 (75%) 100,000 (50%) 100,000 (50%)	2010 2011 2012

## Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

		Personal identification no. (PIN)		Family name
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
(Name withheld)	Doctoral (In Progress)	Supervised 2009 -	Étude du colmatage par champ pulsé	Étudiant PH.D.
(Name withheld)	Master's (In Progress)	Supervised 2009 -	Électroséparation peptides de soya	Étudiante MSc.
MÉRIC, Élise	Doctoral (In Progress)	Supervised 2008 -	Production d'un breuvage fonctionnel à partir de jus enrichi	Étudiante au Doctorat
ROBLET, Cyril	Doctoral (In Progress)	Supervised 2008 -	Séparation et caractérisation de peptides bioactifs de soya	Étudiant au Doctorat
DOYEN, Alain	Doctoral (In Progress)	Supervised 2007 -	Séparation de peptides bioactifs de crabe des neiges	étudiant
IZMEROGLU Sophie	Master's (In Progress)	Co-supervised 2007 -	Électrotechnologies et valorisation du babeurre	étudiante
SCHREYER, arnaud	Postdoctoral (In Progress)	Co-supervised 2007 -	Separation of bioactive molecules from fermented cabbage	Post-Doc
ARAYA-FAR Monica	Res. Associate (In Progress)	Supervised 2003 -	Assistante de recherche	Assistante de recherche
(Name withheld)	Undergraduate (Completed)	Supervised 2009 - 2009	Enrichissement électrodialytique d'un jus de canneberges	Étudiante MSc.
(Name withheld)	Undergraduate (Completed)	Supervised 2009 - 2009	Déminéralisation par électrodialyse avec membrane de	Étudiante École d'ingénieur ESA Angers
N'Diaye, Nafissatou	Master's (Completed)	Supervised 2007 - 2009	Électroséparation Lactoferrine	étudiante
(Name withheld)	Undergraduate (Completed)	Supervised 2008 - 2008	Mise au point méthode de l'étude du colmatage protéique	Industrie
(Name withheld)	Undergraduate (In Progress)	Supervised 2008 - 2008	Application électrotechnologie à séparation phospholipides	Étudiante 2ème cycle
MÉRIC, Élise	Elève ingénieur (Completed)	Supervised 2008 - 2008	Enrichissement protéique de jus	Étudiante au Doctorat
(Name withheld)	Stagiaire IUT (Completed)	Supervised 2008 - 2008	Étude du colmatage des membranes	Étudiant 1er cycle
(Name withheld)	Stagiaire Ph.D. (Completed)	Supervised 2008 - 2008	Étude du colmatage en ÉDUF	Étudiant au doctorat
FIRDAOUS, Loubna	Postdoctoral (Completed)	Supervised 2007 - 2008	Separation of RuBisCo fractions	Maitre de conférence (Univ. Lille, France)
BEN YAKHLEF,	Master's (Completed)	Supervised 2006 - 2008	Anti-oxidant capacity of electrodialytic membranes	étudiante au doctorat
CASADEMO Christophe	Doctoral (Completed)	Supervised 2005 - 2008	Colmatage des membranes en électrodialyse	Stagiaire post-doctoral
(Name withheld)	Master's (Completed)	Co-supervised 2005 - 2008	Caractérisation du chitosane	Étudiant au doctorat

## Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

		Personal identification no. (PIN)		Family name
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
COSSEC, Céline	Undergraduate (Completed)	Supervised 2007 - 2007	enrichissement du jus de canneberges	Étudiante école d'ingénieur ISTAB, Bordeaux France
PÉRICOU, Jérôme	Élève-ingénieur (Completed)	Supervised 2006 - 2007	Optimisation de la technologie d'électroréduction	Étudiant (ISTAB, Bordeaux, France)
POULIN Jean-françois	Master's (Completed)	Supervised 2005 - 2007	Étude du fractionnement d'un hydrolysat trypsique de b-Ig	Professionnel de recherche
AIDER, Mohammed	Doctoral (Completed)	Supervised 2004 - 2007	Électroséparation des oligomères de chitosane	Post-doctorat
LING TENG SHEE	Doctoral (Completed)	Supervised 2004 - 2007	Préparation électrodialytique d'oligomères de chitosane	Enseignant
SCHREYER, Arnaud	Doctoral (Completed)	Supervised 2003 - 2007	Étude de l'impact de la modulation du potentiel redox du lait	Stagiaire Post-Doctoral
LABBÉ, David	Undergraduate (Completed)	Supervised 2006 - 2006	Généralisation extraction du thé en 2 étapes	Étudiant Doctorat
LE ROUX, Thomas	Technician (Completed)	Supervised 2006 - 2006	Inhibition électrodialytique de la chitosanase	Technicien supérieur (France)
RUIZ Benjamin	Stage doctoral (Completed)	Supervised 2005 - 2005	Étude de l'inhibition du colmatage par champs pulsés	stagiaire post-doctoral (France)
ADANDÉ, Sokan	Master's (Completed)	Supervised 2003 - 2005	Électromigration des isoflavones de soya	professionnelle de recherche
AYALA-BRIH Erik	Master's (Completed)	Supervised 2003 - 2005	Colmatage des membranes par les protéines et les minéraux	Directeur scientifique
BEN OUNIS, Wassef	Master's (Completed)	Supervised 2003 - 2005	Électroséparation des protéines du phytosérum	Étudiant au Doctorat
LABBÉ, David	Undergraduate (Completed)	Supervised 2004 - 2004	Séparation des catéchines du thé vert	Étudiant Doctorat
(Name withheld)	Undergraduate (Completed)	Supervised 2004 - 2004	Déminalérisation du sirop d'érable	Professionnelle
(Name withheld)	Élève Ingénieur (Completed)	Supervised 2004 - 2004	Électroréduction du lait à bas voltage	Étudiant Maîtrise
LING TENG SHEE,	Stage Master's (Completed)	Supervised 2003 - 2004	Délipidation du lactosérum par électroacidification	Enseignant

## 1. MOST SIGNIFICANT CONTRIBUTIONS TO RESEARCH

**1<sup>st</sup> and 2<sup>nd</sup> contributions :** Articles used for technology transfer. Our team was the first to demonstrate that during electrodialysis treatment, the presence of magnesium was necessary to induce the formation of CaCO<sub>3</sub>, also identified as crystals of calcite (Casanedmont, Pourcelly and Bazinet. 2007. J. Coll. Interf. Sci. 315 : 544-554.). Furthermore, an alternative configuration for electrodialysis stack was proposed to prevent fouling onset (Ayala-Bribiesca, Araya-Farias, Pourcelly and Bazinet. 2006. Journal of Membrane Science, 280, 790-801.).

**3<sup>rd</sup> contribution : Fundamental work and future technology development.** Recently, in a preliminary work, my team in collaboration with the European Institute of Membrane at Montpellier (France), was the first to demonstrate the effect of pulsed electric field (PEF) on protein fouling of anion-exchange membrane during conventional ED of a model solution composed of salts and caseinate (Ruiz, Sistat, Huguet, Pourcelly, Araya-Farias and Bazinet. 2007. Journal of Membrane Science. 287 : 41-50). These results are very interesting for the development of new applications of electromembrane technology on complex medium such as liquid food. Indeed, with the application of PEF technology to electrodialysis the precipitation *in-situ* of proteins for example is now possible since the fouling of membrane is the major scientific lock for electromembrane process intensification.

**4<sup>th</sup> contribution : A lecture presented to scientists, equipment manufacturers and industrials and patent.** Lin Teng Shee,F. ;Arul, J. ; Brunet, S. ; Mateescu, A.-M. ; Bazinet, L. Solubilization of chitosan by bipolar membrane electro-acidification. Invited lecture at the 17th annual annuel of the North American Membrane Society, Chicago (USA), 12-17 may 2006. It appeared that our works are the main studies carried-out on food applications at the international level. The principal manufacturer of bipolar membranes (BP) highlighted during this conference that the development of BP membranes was not linked to their effectiveness but to the limited applications. Hence, there is a great interest in developping new applications especially in food. This technology was in the patent process (Bazinet and Lin Teng Shee. Method for transforming polysaccharides in oligomers with bipolar membrane electrodialysis. US patent application filled on 27 September 2007).

**5<sup>th</sup> contribution : Development of a new electromembrane technology and patent.**

Patent entitled «Process and system for separation of organic charged compounds», patent demand n° PCT/CA2005/000337 by Bazinet et al. This novel technology constitutes a major breakthrough in purification and fine chemistry separations, since it stands as a reliable and cost-effective separation technique, especially when compared to traditional methods, such as chromatography. This technology, called electrodialysis with filtration membrane (EDFM), couples size exclusion capabilities of UF or porous membranes with the charge selectivity of electrodialysis (ED). EDFM acts by attracting the molecules, according to their charge, through filtration membranes with the proper molecular weight cut-off (MWCO) range according to the fraction of interest. The applications are potentially numerous, as already demonstrated by the very different natures of molecule on which the technology was tested. The impact of this innovative technology concerns the fields of bio-food, bio-pharmaceutic, chemical and biotechnology, sectors for which the purification of bio-compounds is a priority research objective

## 2. RESEARCH CONTRIBUTIONS AND PRACTICAL APPLICATIONS

### a) Articles in refereed publications :

a-1) published or accepted (2005-2009 = 47)

Selection of publications from 2005 to 2009.

*Students, authors or co-authors of publications, are highlighted in italic and underlined.*

LB#73. Aider, M.; Brunet, S.; Bazinet, L. 2009. Effect of Solution Flow Velocity and Electric Field Strength on Chitosan Oligomer Electromigration Kinetics and their Separation in an Electrodialysis with Ultrafiltration Membrane (EDUF) system. Separation and Purification technology, 69 : 63-70.

**LB#72.** *Lin Teng Shee, F.; Bazinet, L.* 2009. Cationic balance and current efficiency of a three-compartment bipolar membrane electrodialysis system during the preparation of chitosan oligomers. *Journal of membrane Science*, 341 ; 46-50..

**LB#71.** *Bazinet, L.; Péricou, J.; Araya-Farias, M.* 2009. Effect of flow rate and acid molarity on redox potential modulation during electroreduction of milk and simulated milk aqueous mineral phase. *Food Chemistry*, 114 : 919-926.

**LB#69.** *Casademont, C.; Sistat, P.; Ruiz, B.; Pourcelly, G.; Bazinet, L.* 2009. Electrodialysis of model salt solution containing Whey Proteins : Enhancement by pulsed electric field and modified cell configuration. *Journal of Membrane Science*, 328(1-2) : 238-245.

**LB#68.** *Bazinet, L.; Firdaus, L.* 2009. Membrane processes and devices for separation of bioactive peptides. **Published on invitation.** *Recent patents on Biotechnology*, 3(1) : 61-72.

**LB#66.** *Casademont, C.; Araya Farias, M.; Pourcelly, G.; Bazinet, L.* 2009. Impact of electrodialytic parameters on cation migration kinetics and fouling nature of ion-exchange membranes during treatment of solutions with different magnesium/calcium ratios. *Journal of membrane Science*, In Press.

**LB#65.** *Aider, M.; Brunet, S.; Bazinet, L.* 2009. Effect of pH and Cell Configuration on the Selective and specific electrodialytic separation of Chitosan oligomers. *Separation and Purification Technology*, In Press.

**LB#64.** *Labbé, D.; Tétu, B.; Trudel, D. Bazinet, L.* 2008. Catechin stability of EGC- and EGCG-enriched tea drinks produced by a two-step extraction procedure. *Food Chemistry*. 111 (1) ; 139-143.

**LB#62.** *Le Dévédec, F.; Bazinet, L.; Furtos, A.; Venne, K.; Brunet, S.; Mateescu, M.A.* 2008. Separation of chitosan oligomers by immobilized metal affinity chromatography. *Journal of Chromatography A*. 1194 (2), 165-171.

**LB#60.** *Schrever A., Britten M., Chapuzet J-M., Lessard J. Bazinet L.* 2008. Electrochemical modification of the redox potential of different milk products and its evolution during storage. *Innovative Food Sciences and Emerging technology*, 9: 255-264.

**LB#59.** *Casademont, C.; Pourcelly, G.; Bazinet, L.* 2008. Effect of Magnesium/Calcium ratio in solutions treated by electrodialysis: characterization of anionic-exchange membrane fouling. *Journal of colloids and interface Science*, 322 (1); 215-223.

**LB#58.** *Lin Teng Shee, F.; Angers, P.; Bazinet, L.* 2008. Characterization of cationic membrane fouling during cheddar cheese whey electroacidification. *Journal of Colloids and Interface Science*. 322 (2) ; 551-557.

**LB#57.** *Lin Teng Shee F., Arul J., Brunet S., Bazinet L.* 2008. Effect of Bipolar Membrane Electrobasisfication on Chitosanase Activity during Chitosan Hydrolysis. *Journal of Biotechnology*. 134 (3-4) : 305-311.

**LB#56.** *Poulin, J.-F.; Amiot, J.; Bazinet, L.* 2008. Impact of feed solution flow rate on peptide fractionation by electrodialysis with ultrafiltration membrane. *Journal of Agricultural and Food Chemistry*, 56 (6) : 2007-2011.

**LB#54.** *Casademont, C.; Pourcelly, G.; Bazinet, L.* 2007. Effect of Magnesium/Calcium ratio in solutions treated by electrodialysis: characterization of CEM fouling. *J. Coll. Interf. Sci.* 315 : 544-554.

**LB#53.** *Poulin, J.-F.; Amiot, J.; Bazinet, L.* 2007. Improved peptide fractionation by electrodialysis with ultrafiltration membrane: influence of ultrafiltration membrane stacking and electrical field strength. *Journal of Membrane Science*, 299 : 83-90.

**LB#52.** *Lin Teng Shee, F.; Angers, P.; Bazinet, L.* 2007. Delipidation of a whey protein concentrate by electroacidification with bipolar membranes (BMEA). *J. Agric. Food Chem.*, 55, 3985-3989.

**LB#50.** *Bazinet, L.; Gaudreau, H.; Lavigne, D.; Martin, N.* 2007. Partial demineralization of maple sap by ED : impact on syrup sensory and Physicochemical quality. *J. Sci. Food Agric.* 87 : 1691-1698.

**LB#49.** *Bazinet, L.; Labbé, D.; Tremblay A.* 2007. Production of a green tea EGCG enriched fraction by a two-step extraction procedure. *Séparation and Purification Technology*. 56; 53-56

**LB#48.** *Lin Teng Shee, F.; Arul, J.; Brunet, S.; Bazinet, L.* 2007. Chitosan Solubilization by Bipolar

Membrane Electroacidification : Reduction of Membrane Fouling. *J. Membr. Sci.* 290 : 29-35.

**LB#47.** *Ayala-Bribiesca, E.*, Pourcelly, G., **Bazinet, L.** 2007. Nature identification and morphology characterization of AEM fouling during conventional electrodialysis. *J. Coll. Interf. Sci.* 308: 182-190.

**LB#46.** *Ruiz, B.*; Sistat, P.; Huguet, P.; Pourcelly, G.; Araya-Farias, M.; **Bazinet, L.** 2007. Application of relaxation periods during electrodialysis of a casein solution : impact on anion-exchange membrane fouling. *Journal of Membrane Science.* 287 : 41-50.

**LB#45.** *Aider, M.*; Arul, J.; Mateescu, A.-M.; Brunet, S.; **Bazinet, L.** 2006. Electromigration Behavior of a Mixture of Chitosan Oligomers at Different Concentrations. *J. Agric. Food Chem.* 54 : 10170-10176.

**LB#44.** *Lin Teng Shee, F.*; Arul, J.; Brunet, S.; Mateescu, A.-M.; **Bazinet, L.** 2006. Chitosan Solubilization by Bipolar Membrane Electro-acidification. *J. Agric. Food Chem.* 54 : 6760-6764.

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**LB#26.** **Bazinet, L.** 2005. Electrodialytic phenomena and their applications in the dairy industry : A Review. *CRC Critical review in Food Science and Nutrition*, 45:307-326.

### c-3) Monographs, book or book chapters

7. **Bazinet, L.**; Doyen, A.; Roblet, R. **2010.** Electrodialytic phenomena and electromembrane technologies associated. **Published on invitation.** In Separation, extraction and concentration processes in the food, beverage and nutraceutical industries. S.S.H. Rizvi (ed), Woodhead Publishing. In Press.

6. **Bazinet, L.**; Lachkar, D.P.; Pouliot, Y. **2009.** Emerging membrane technologies and applications for added-value dairy ingredients. **Published on invitation.** In Taylor and Francis, In press.

4. Pourcelly, G.; **Bazinet, L.** 2008. Developments of Bipolar Membrane Technology in Food and Bio-industries. In *Handbook of Membrane Separations: Chemical, Pharmaceutical and Biotechnological Applications*. Marcel Dekker Inc, New York.

#### c-4) Conference presentations (2005-2009 = 29)

Selection of conferences or lectures from 2005 to 2009

*Students, authors or co-authors of presentations, are highlighted in italic and underlined.*

60. **L. Bazinet**, L. Firdaous, P. Dhuister, J. Amiot, D. Lecouturier, F. Lutin, L.-P. Vézina., Scale-up of electrodialysis with ultrafiltration membranes: fractionation of an antihypertensive peptide from alfalfa white protein hydrolysate. Conférence présentée dans le cadre de Euromembrane 2009, session «Pharmaceuticals and biotechnology», Montpellier (France), 6-10 septembre 2009.

59. **C. Casademont**, *E. Ayala-Bribiesca*, P. Sistat, *B. Ruiz*, G. Pourcelly, **L. Bazinet**. Electrodialysis of model salt solutions containing whey proteins : mineral fouling investigations and enhancement by pulsed electric field and modified cell configuration. Conférence présentée dans le cadre de Euromembrane 2009, session «Fouling», Montpellier (France), 6-10 septembre 2009.

55. **Vanhoute, M.**; Dhuister, P. ; Firdaous, L. ; Froidevaux, R. ; Lecouturier, D. ; Guillochon, D. ; **Bazinet, L.** Influence de l'hème sur le fractionnement d'un hydrolysat peptidique d'hémoglobine bovine par électrodialyse avec membranes d'ultrafiltration. Conférence présentée lors de la 2<sup>ème</sup> journée de l'Union de Génie des Procédés et d'Energétique du Nord Pas-de-Calais, Maubeuge (France), 14 mai 2009.

54. *N'diaye, N.*; Pouliot, Y.; Saucier, L.; Beaulieu, L.; **Bazinet, L.** Séparation électrodialytique de la lactoferrine bovine. Conférence présentée lors du colloque «Journée d'Information Scientifique et Technique en Génie Agroalimentaire, Saint-Hyacinthe (QC), 25 Mars 2009.

50. Araya-Farias, M.; **Bazinet, L.** Electrodialysis : Separación y fraccionamiento de moléculas bioactivas. Conférencier invité dans le cadre du projet international, Ciclo Internacional de Seminarios: Investigación aplicada a la Industria Alimentaria. Valparaíso, Chili, 17 octobre 2008.

48. Pourcelly, G.; *Casademont, C.*; *Ayala Bribiesca, E.*; Araya Farias, M.; **Bazinet, L.** Impact of diluate solution composition in protein and magnesium on membrane fouling during conventional ED. Conférence présentée à l'International Congress on Membranes and Membrane Processes (ICOM), Section Membrane fouling-General topics, Honolulu, Hawaii, 12-18 Juillet 2008

42. **Bazinet, L.** J.F-. Poulin, J. Amiot. Influence of process parameters on peptide fractionation by electrodialysis with ultrafiltration membrane. Conférence présentée dans le cadre de ICEF 10 «International Congress of Engineering and Food», Vina del Mar, Chili, 20-24 avril 2008.

41. **Bazinet, L.** L'électrodialyse avec membrane d'ultrafiltration : application à la séparation des oligomères de chitosane et aux peptides bioactifs. Conférencier invité lors des Diners du Québec, dans le cadre du 4<sup>ème</sup> symposium International Santé Mer. Granville, France, 4-5 Octobre 2007.

35. *Lin Teng Shee, F.* ;Arul, J. ; Brunet, S. ; Mateescu, A.-M. ; **Bazinet, L.** Solubilization of chitosan by bipolar membrane electro-acidification. 17<sup>ème</sup> meeting annuel de la North American Membrane Society, «Electrodialysis» session. Chicago (USA), 12-17 mai 2006.

34. *Poulin, J.-F.*; Amiot, J. ; **Bazinet, L.** Electrodialysis with ultrafiltration membrane : a new way for simultaneous purification of basic and acid bioactive peptides. 17<sup>ème</sup> meeting annuel de la North American Membrane Society, Chicago (USA), 12-17 mai 2006.

34. **Bazinet, L.** Séparation des protéines sériques par EAMBP. Conférencier invité, MEMPRO 3 «Intégration des membranes dans les procédés»,, Nancy (France) 5-7 avril 2006.

32. *Schreyer A.*, Chapuzet J-M., **Bazinet L.**, Britten M., Lessard J. Étude de la régulation électrochimique du potentiel redox du lait pour améliorer son entreposage et/ou sa transformation ultérieure. Conférence présentée au symposium «Journées d'électrochimie», Saint-Malo (France), 5-8 July 2005.